

ETNO response to the public consultation on the draft BEREC common position on Layer 2 Wholesale Access Products - BoR (16) 95

ETNO welcomes the opportunity to contribute to BEREC's public consultation on the common position on Layer 2 wholesale access products (L2 WAP).

ETNO took note of BEREC's approach to give an overview of existing L2 WAP products and identify common characteristics throughout Europe resulting in its report BoR (15) 133. Last year's report had expressly no intention of being normative or recommending best practices. ETNO sees no additional value in departing from last year's approach and issuing common positions on L2 prices and technical characteristics of WAPs (both for markets 3a and 3b), as their usage, requirements and characteristics vary according to different national circumstances. L2 WAPs have been introduced and are well established in several European markets. Adapting these products tailored to national market needs in reaction to a BEREC Common Position risks being costly and inefficient.

The regulatory approach to be taken for the future regulation of wholesale products should be aligned with the DSM strategy, namely to promote network investments and innovation and thereby fostering long-term consumers' interests.

The report is clearly anchored in the rules governing the current framework, which were designed to spur competition in existing networks, taking for granted that the approach to be taken with future NGA should be the same. References such as: *"situations in which access to physical infrastructure was not considered sufficient to ensure effective competition at the retail level"* seem to reflect a disproportionate approach focussing on physical unbundling and relying on the ladder of investment concept to the detriment of a long term vision that allows operators to deploy new technologies.

Moreover, regulation of Layer 2 products itself should only apply if strictly necessary and proportionate. Voluntary wholesale arrangements reached between the relevant players in one Member State should take precedence over regulatory impositions. This is very relevant for some technical issues, such as the number of VLANs, but also on economic conditions, that may include different levels of risk sharing/ wholesale prices.

Common Position 1: Conditions for the imposition of L2 WAP on market 3a

When defining markets that may be subject to regulation ETNO believes that geographic segmentation is needed. Competitive situations can be very different depending on different geographic areas (within a country) and, consequently, should be differently addressed. Where market segmentation is not justified, geographic remedies differentiation should be applied in order to reflect different competitive conditions across the national territory. Nevertheless, no reference is made in the report to this issue. In particular, regulators should take into account current and prospective geographic variations of infrastructure development. In areas where the retail market can be competitive without access obligations, no regulation should apply.

BEREC's common positions only focus on virtual access to copper or fibre networks in market 3a. In our opinion BEREC should not neglect the fact that L2 WAP, as a data-only service with support

for IP unicast is already available on broadband-cable based networks¹. Hence, the common position should explicitly state that L2 WAP also apply to cable networks.²

A lot of emphasis is put on “access to wavelength unbundling of an FTTH” while, to our knowledge, this solution has not been applied in any market. In fact, these kinds of references could be highly counterproductive as the sole prospect of the use of this technology for emulating classical unbundling regulation could discourage the implementation of this new technology.

BEREC recommends to impose L2 WAP on market 3a if “*wholesale access remedies on market 3b are not sufficient to ensure effective competition at retail level.*” It seems that such an approach is contrary to the “modifying greenfield approach” and does not comply with the provisions of the EC Recommendation 2014/710/EU on relevant product and service markets and its Explanatory note.³ ETNO recalls that wholesale regulation is only necessary if there is a competition problem on the retail market absent regulation, and if there is an operator with SMP.

Finally, ETNO believes that L2 local WAP should be imposed in market 3a “*in situations where fibre physical unbundling is not technically or economically feasible or where the implementation of SLU unbundling would impede the realisation of the full benefits of VDSL2 vectoring*”, an approach adopted so far by several NRAs, as highlighted in the explanatory note of the cited Recommendation.

Common Position 2: Pricing of L2 WAP

BEREC’s common position starts by stating that “Prices of L2 WAP should be cost-oriented” only making reference to the NGA recommendation (2010/572/EU) without highlighting the fact that cost oriented price control is a remedy that should be properly justified based on the merit of each regulation case. Then BEREC adds certain nuances stemming from the Recommendation on non discrimination and costing methodologies (2013/466/EU).

However, the reference to the Recommendation on Costing and Non-Discrimination on p. 7 is incomplete as it fails to acknowledge that the described scenario is not the only scenario for lifting

¹ This data-only service is available on TDC’s cable network in Denmark and is based on the BSoD standard (Business Services over DOCSIS) available on and a mandatory part of all DOCSIS 3.0-enabled cable networks. Cable operators all over the world today use BSoD to deliver data services to their retail business customers. There are no standardized and commercially available support systems to enable BSoD being used as a wholesale service involving two operators and a retail customer. Support for multicast is not a mandatory part of the DOCSIS standard and will require a regulatory mandate and take a few years to be implemented in cable networks.

² Case SE/2015/1687 - PTS concluded that it is technically and commercially possible to offer bitstream over cable in Sweden, and that this infrastructure must be considered part of the relevant market.

³ The European Commission clarifies that remedies in market 3b have to be imposed once remedies in the most upstream market (i.e. market 3a) are not sufficient to ensure effective retail competition and not *vice versa*: “*After imposing regulatory remedies at the most upstream wholesale level, a "modified Greenfield approach" should be carried out at retail level in order to determine whether ex ante regulation of a more downstream market- in this case Wholesale Central Access- is necessary as well in order to remedy any remaining competition problem.*”

(or better not imposing) cost orientation in particular in case of infrastructure-based competition (cf. paragraph 58 of Commission's recommendation).⁴

ETNO believes that NRAs should promote the flexible and pro-investment interpretations of the Recommendation on Costing and Non-Discrimination, as well as the swift implementation of its flexibility provisions (in particular the Economic Replicability Test). We think that the starting point on pricing should be to give preference to the application of the flexibility provisions of the Recommendation on Costing and Non-Discrimination instead of focusing on the NGA recommendation that is partially outdated.

Cost orientation constitutes a very intrusive regulatory intervention which inevitably shifts market dynamics away from investment and innovation to a 'price only' competition. Cost-based price control of wholesale prices drastically limits the value of the networks and discourages investment by limiting the potential revenues to a regulated rate of return.

Common Position 3: Technology

ETNO agrees that, when deemed necessary, L2 WAP should be based on Ethernet.⁵ However, it should be noticed that regarding Ethernet transparency, some Ethernet layer 2 protocols might not be supported in L2 WAP.

Common Position 4: CPE/Modem

ETNO agrees that if a L2 WAP is imposed, the access seekers should also have the possibility to use and configure their own CPE/modem/ONT. However, these have to fulfil certain requirements and be validated by the network owner or even subject to a certification scheme. The fulfilment of certain requirements is crucial in order to ensure a proper interworking with the network of the provider of the L2 WAP. In particular the interoperability between the ONT and the OLT of different Vendors is currently not ensured, therefore BEREC should not suggest that access seekers use their ONT.

Furthermore, terminal equipment must comply with the interfaces of public networks which network operators have the obligation to publish notably under EU law (Directive 2008/63/EC on competition in the markets in telecommunications terminal equipment).

Common Position 5: Bandwidth

In principle, the regulated wholesale product should allow to replicate the retail offers of the mandated operator. The offer of any other service beyond this should be left to the company offering the L2 WAP-product. It is important to ensure that different prices can be offered per different bandwidth providing wholesale pricing flexibility. ETNO agrees also on BEREC's imposition to manage bandwidth profiles of the subscriber access line by the mandated operator

⁴ Paragraph 58 Recommendation 203/466/EU: *"The conditions set out in the points 48-57 should not be seen as the only circumstances under which NRAs can decide not to impose regulated access prices for NGA wholesale inputs. Depending on the demonstration of effective equivalence of access and on competitive conditions, in particular effective infrastructure-based competition, there may be additional scenarios where the imposition of regulated wholesale access prices is not warranted under the Regulatory Framework."*

⁵ Ethernet can be applied on DOCSIS based HFC networks. See DOCSIS standardisation documents BSoD or L2VPN on the cablelabs site.

for secure and stable operation, while offering flexibility for the access seekers inside the limit(s) of the bandwidth profiles.

Common Position 6: Quality of Service

ETNO agrees with BEREC's position that a L2 WAP should offer a comparable QoS as the mandated operator's retail arm is offered on the same access network. However, ETNO notes that QoS parameters depend on the topology of the Point of Handover (A10-NSP). L2 WAP with local PoH may have better QoS parameters than regional or central PoHs. Finally, ETNO does not see any need for BEREC to specify minimum QoS parameters, as these depend too much on technology, topology and geography of the networks and should be determined on a country and network specific basis by the network operator.⁶

Common Position 7: Traffic Prioritisation

ETNO agrees with BEREC that L2 WAP should also offer access seekers the possibility to prioritise the traffic. At least one prioritized traffic flow should be available. In principle, the priority classes that are already available on the network should be sufficient for access seekers - additional priority classes should be imposed only if necessary and proportionate.

Regarding the number of VLANs (Common Position 9) if only one C-VLAN per customer is applicable, prioritization must be per packet. In case of multiple C-VLANs a per VLAN prioritization can be applied.

Common Position 8: Multicast

ETNO supports BEREC approach that Multicast should not be offered by default. In fact, L2 WAP should only have a multicast functionality if a duly justified SMP analysis has proven that such remedy is justified to remedy a specific proven market failure related to the broadband market.⁷ BEREC's report (BoR (15) 133) demonstrates that many NRAs (AT, DE, FR, IT-local PoH and ES) decided not to impose any multicast functionality as there was either low demand for services generating multicast traffic or the multicast frame replication was not necessary to ensure technical and economical replicability of competing retail offers.

Common Position 9: Number of VLANs

The decision on the need to make available several VLANs should be left to the specific characteristics of each particular case. ETNO believes that industry agreements should take precedence over regulatory impositions. Voluntary wholesale arrangements reached between the relevant players in one Member State, which are preferable than mandatory product definition, may lead to the appropriate number of VLANs compatible with the technical limit of

⁶ Access seekers should be able to choose the quality of their services and to provide services with higher service requirements. It is however a misunderstanding that uncontended bandwidth is necessary to achieve that goal. The use of traffic prioritisation in combination with adequate capacity management is usually enough to give guarantees on well-defined traffic parameters like packet loss, delay and jitter. In this way, services with higher service requirements can be provided by access seekers. When discussing or defining Quality of Service, this discussion should therefore be focussing on clearly defined traffic parameters like the aforementioned traffic parameters rather than ill-defined qualifications like "uncontended bandwidth".

⁷ The evolution of end-customer's demand needs to be part of the proportionality analysis, as in some Member States, multicast traffic is decreasing when compared to unicast video traffic distribution. This may grow in the future.

the access devices. Hence, BEREC should leave the question of multiple vs. single VLAN open and not suggest any specific model.

Common Position 10: Customer Identification

ETNO agrees with BEREC that a proper identification of the end customer (subscriber/subscriber line etc.) must be available. A lot of different identification options are possible. The mandated operator shall offer a customer identification technology which is either standardized, considered as best practice or agreed between operators at national level.

Common Position 11: Security

ETNO takes note of BEREC's imposition on security measures for L2 WAP. Depending on the selected network architecture and technology of the L2 WAP the responsibility of necessary security measures may be distributed between access network operator and access seeker differently.

Common Position 12: Fault management

ETNO agrees that in case of a fault timely and proper information on parameters of the concerned subscriber access lines are indispensable for the affected access seeker.

About ETNO

ETNO (European Telecommunications Network Operators' Association) represents Europe's telecommunications network operators and is the principal policy group for European e-communications network operators. ETNO's primary purpose is to promote a positive policy environment allowing the EU telecommunications sector to deliver best quality services to consumers and businesses.

For questions and clarifications regarding this position paper, please contact Francesco Versace, Director of Regulatory Affairs - versace@etno.eu